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BLACK SCHOLARS MATTER: DEVELOPMENT AND VALIDATION OF A CAMPUS
RACIAL CLIMATE MEASURE FOR AFRICAN AMERICAN COLLEGE STUDENTS

by

DOMINIQUE THOMAS

Under the Direction of Wing Yi Chan, Ph.D.

ABSTRACT

Recent events have brought the issues of campus racial climate to the forefront. Research supports campus racial climate's impact on a host of academic outcomes for African American college students (Chavous, 2005; Tynes, Rose, & Markoe, 2013). While there has been a significant amount of research, there are several limitations. One issue is the varying definitions and measures of campus racial climate used across studies. These differing conceptualizations of racial climate preclude adequate integration of the existing research. Another area of concern is that studies lack representative samples of African American students. Many studies either compare African American students to White students or include African Americans within a broader group of students of color that is still compared to White students. Many measures are also unidimensional. Before campus racial climate research can be advanced, it is vital to formulate a measure of campus racial climate that is multidimensional and encompassing of different levels within the college setting. The purpose of the proposed study is to develop and validate a multidimensional measure of campus racial climate for African American college

students. The study employed a mixed-methods design. I conducted five group interviews to identify emergent themes in African American college students' perceptions of racial climate. Based on these themes, a racial climate measure was constructed and then validated using survey data from 334 participants split into two samples. Exploratory factor analysis supported a three-factor solution with 15 items. Confirmatory factor analysis suggested a good model fit and the measure demonstrated reliability, convergent validity, and criterion-related validity. Recommendations for improvements to campus racial climate are provided.

INDEX WORDS: African Americans, College, Education, Racial climate

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DOMINIQUE THOMAS

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

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Georgia State University

2017

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Dominique Thomas
2017

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RACIAL CLIMATE MEASURE FOR AFRICAN AMERICAN COLLEGE STUDENTS

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DEDICATION

I wish to dedicate my dissertation to my grandmother. I know she would be proud of me and I wish that she would have been able to see me progress this far. I would also like to dedicate this to all my friends (Allana, Anthony, Chris, Wes, Irene, Chauncey and many more) who have been by my side during this journey from the beginning. Finally, and most certainly not least, I would like to dedicate this to my fiancé Josie who has so supportive of me during this dissertation process. I greatly appreciate all the friends and family who have supported me for the last six years of this program.

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1 INTRODUCTION

Racial disparities are negatively affecting African American students at every level of education. The United States Department of Education (2016) reported that African American students have less access to high-level math and science classes as well as less access to accelerated or advanced placement (AP) classes. The report also found that African American students are more likely to attend schools with high proportions of inexperienced teachers. As reported by the National Center for Education Statistics (Skomsvold, Radford, & Berkner, 2011), African American college students have lower 6-year graduation rates than any other ethnic group. These disparities are the result of a long history of racial discrimination.

The long history of racial injustice and subjugation places African Americans at a disadvantage in education. The Transatlantic Slave Trade brought Africans to the U.S. as slave labor, a condition which lasted more than 300 years. During slavery, it was illegal for African Americans to learn to read. Although African Americans made initial social, educational, and economic gains after the abolishment of slavery, the end of Reconstruction and the institution of Jim Crow laws quickly reversed the course for African Americans. African Americans were forced to attend separate schools that had fewer resources than the schools that White students attended. This era ended with the *Brown vs. Board of Education* Supreme Court case that declared segregation unconstitutional, yet inequalities in education have continued to persist for the decades following this landmark case (Bell, 2004). To mitigate and eliminate these disparities, it is important to consider the educational settings in which African American students find themselves. One aspect of educational settings that has a significant impact on the achievement of African American students is racial climate. Thus, the purposes of the proposed

study are to develop and validate a multidimensional measure of racial climate specifically for African American college students.

1.1 Importance of Educational Settings

Individuals exist within settings and attempt to make meaning of those settings. Moos (1978; Moos & Moos, 1978) examined settings from a person-centered perspective, meaning that he examined what social settings mean to the individuals who are nested within them. A social climate is characterized by the nature and intensity of interpersonal relationships, support of individual growth, and clarity around expectations as well as the maintenance of control and the response to change. Research has consistently found that positive educational settings (including positive racial climates) are related to students' achievement (Chavous, 2005; Eccles & Roeser, 2009; Fischer, 2010). Factors such as peer and teacher support and teacher expectations promote academic achievement for students (Eccles et al., 1983). While these factors are important, additional factors such as fair representation and distribution of resources need to be considered to understand what constitutes a positive educational setting for African American students.

The educational setting has been hostile to African American students. The norms of a traditional educational setting fail to incorporate cultural norms of African Americans (Hughes, McGill, Ford, & Tubbs, 2011). Teachers often misconstrue behaviors of African Americans as disruptive and unruly, which leads to much harsher punishment. Teachers punish African American students at a higher rate and more harshly than their White counterparts for the same behavior (Schott, 2010; U.S. Department of Education, 2016). Also, conventional curricula often leave out the historical contributions of African Americans. Thus, many African American students do not see any positive representation of their group within the school context (Hughes,

McGill, Ford, & Tubbs, 2011). This hostility and apathy towards African American students has negative effects on their psychological and academic outcomes.

Stereotypes portray African Americans college students as intellectually inferior. Steele and Aronson (1995) found support for their theory of stereotype threat, which posits that African Americans' academic performance suffers when race becomes salient and when a task is presented as a measure of ability. In their experiment, they found that African American participants performed worse than White students when the test was presented as measure of ability, but performed on par with or better than White Students when it was presented as less reflective of ability. For stereotype threat, African Americans do not have to endorse or believe the negative stereotypes for their performance to suffer (Steele & Aronson, 1995). Negative racial climates may threaten students' identities as African American. Johnson-Ahorlu (2013) found further support of this by examining how African American college students experience and cope with negative stereotypes. African American college students reported the experiences of battling stereotypes and fear of fulfilling those stereotypes. Students also felt faculty and classmates stereotyped them as intellectually incapable and undeserving. They found it difficult to address issues related to stereotypes when the perpetrators are faculty members. Many reported feelings of anger, sadness, pressure, and anxiety. In addition to causing psychological harm, these stereotypes have a negative impact on the academic performance of African American college students.

Research has documented the negative effect of racism on African American students' academic achievement. Bynum, Burton, and Best (2007) found that experiences with racism predicted greater stress and increased symptoms of poor mental health among African American college students. Similarly, experiences with racism are associated with lower academic

motivation and less value placed on education for African American college students (Caldwell & Obasi, 2010; Reynolds, Sneva, & Beehler, 2010). An aspect of educational settings that is relevant for African American students is the campus racial climate. African American college students have unique experiences with racial climate and because negative racial climates can have negative effects on African American students, it is important to improve the racial climate for these students. As such, the proposed study aims to develop a racial climate measure for African American college students with these specific experiences in mind.

1.2 Racial Climate and African American Student Achievement

Racial climate is particularly important to African American college students and it is experienced differently by this group of students compared to other racial/ethnic minority students. First racism is not experienced in the same way by different racial and ethnic groups. Second, African American college students tend to report worse racial climates than other racial and ethnic groups (Ancis, Sedlacek, & Mohr, 2000). Third, African American college students face stereotypes of intellectual inferiority (Johnson-Ahorlu, 2013). These three factors illustrate the unique perspective African American college students have regarding campus racial climate.

Racism manifests differently based on a person's race or ethnicity; racial and ethnic groups do not experience racism in the same ways. Hughes, Seidman, and Williams (1993) discuss how certain cultural aspects are not as relevant to different cultural groups. African Americans are assumed to be criminally deviant and intellectually inferior. Asian Americans are stereotyped as a model minority and Latino/as are stereotyped as perpetual foreigners (Sue et al., 2007). This is also consistent with Jones' (1997) discussion of cultural racism in which a group's culture is deemed inferior as well. Given that culture manifests in different ways for these different groups, the racism they face manifests differently as well. Jones (1997) discusses

the black exceptionalism thesis which posits African Americans have a unique experience due to factors such as slavery, legally enforced racial segregation and discrimination, rigid and caste like boundaries, and persistent lower-class status relative to White Americans and other immigrant groups. He references a series of studies that suggest White Americans' symbolic racism (connection of antigroup feelings and strong support for traditional American values) toward African Americans is stronger than toward Latino/as and Asian Americans. This is consistent with research that found Asian American students perceived the campus climate as more welcoming to students of color than did African American students (Rankin & Reason, 2005). For African American college students, this is also explained by their tumultuous relationship with their institutions. History possesses many accounts of university enacting policies and practices with the explicit role of perpetuating African Americans' second class status through reproducing social inequalities already detrimental to African Americans (Rogers, 2012).

Jones' (1997) model of institutional racism proposes that institutional racism is reproduced within educational institutions. Social reproduction occurs because education in capitalist societies perpetually reproduce structures of social inequality, both between and within schools (Potts, 2003). Culture manifests through institutions and creates values. Institutions then socialize individuals to take on these values to be competent within the institution (Jones, 1997). A longstanding cultural stereotype has been the intellectual inferiority and the laziness of African Americans, implying both lack of ability and lack of effort to improve. Such a cultural belief informs individuals' negative judgments of African American students, their history, and culture while manifesting through institutions, particularly via individuals with power within the institution. These types of beliefs also inform the value that is placed on supporting, recruiting,

and retaining African American students and other students of color. African American students may not see their lived experiences or cultural background reflected in any curricula. Negative stereotypes help to justify the negative outcomes of African American students and African American students are blamed for these outcomes rather than any social inequities. At the individual level, students learn what is explicitly communicated and what is implicitly communicated from the institution and others within it. Implicit stereotypes link negative attributes to African American students, impacting how members of other racial and ethnic groups behave toward them. The racial prejudice that individuals express toward African Americans is an individual level response to the racialized context of the university and of the broader culture. Educational institutions reproduce the inequities that already negatively impact African Americans and it is important to consider their perspective when attempting to improve campus racial climates.

African American college students report more negative views of campus racial climate than other racial and ethnic groups. For example, Ancis, Sedlacek, and Mohr (2000) found that African American students perceived and experienced more racial conflict and separation as well as more racial tension in residence halls than Asian American, Latino, and White students. They also reported less faculty and student respect from different racial and ethnic groups, and less overall satisfaction with the campus climate. African American students experienced additional pressure to conform to racial and ethnic stereotypes and to minimize any characteristics that were overtly racial or ethnic to be accepted. African Americans experienced the most faculty racism and the most unfair treatment by faculty, teaching assistants, and other students (Ancis et al., 2000).

There are stereotypes of African American students as being intellectually inferior. For example, Solorzano, Ceja, and Yosso (2000) conducted a qualitative study examining African American college students' perceptions of the campus racial climate. Many students said that faculty tended to have low expectations of them, even when there was evidence to the contrary. Because of these interactions, students would begin to feel a sense of self-doubt. These experiences led to African American students feeling as if they could not academically excel which might have contributed to some of them dropping out, changing majors, and transferring schools (Solórzano, Ceja, & Yosso, 2000).

Although racial climate is an issue for African Americans, much of the racial climate research is comparative in nature and uses predominantly White samples with White students as the reference group (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999). In a study by Tynes, Rose and Markoe (2013), the sample consisted of 48 African American students and 169 White students. The study by Johnson, Wasserman, Yildirim, and Yonai (2014) had 99 African American students compared to 943 White students. Cabrera and colleagues' (1999) study had 315 African American students and 1139 White students. The sample in the study by Locks, Hurtado, Bowman, and Oseguera (2008) was 69% White and only 4% African American. Johnson's (2012) study had 92 African Americans and 1199 White students. In some of these studies, African Americans only constitute part of a larger group of students of color for which there are not any disaggregated data in terms of their perceptions of the racial climate. (Johnson, Wasserman, Yildirim, & Yonai, 2014; Locks, Hurtado, Bowman, & Oseguera, 2008).

The body of literature on racial climate suggests its significant relevance for African American college students. African American students tend to have more negative views of racial climates on their campuses (Reid & Radhakrishnan, 2003), leading to negative outcomes.

African American college students also must fight against stereotypes of intellectual inferiority. Future research should examine the unique experiences of African American students. The integration of these findings and steps to move forward, however, need to address several limitations in the conceptualization and measurement of racial climate. There is no singular agreed-upon definition of campus racial climate, making it difficult to assess and improve racial climate. Given these experiences and the variety of definitions, it becomes important to center racial climate research on the experiences of African American students and develop a measure of racial climate specifically for African Americans.

1.3 Racial Climate and Student Outcomes

Racial climate is a significant factor in determining the outcomes of African American college students. Some studies examine racial climate as students' attitudes and perceptions about issues of race and diversity on campus, while some conceptualizations focus strictly on experiences with racism on campus. Other studies examine racial climate from the perspective of interracial interactions. The construct has been defined in several ways, leading to diverse interpretations of its nature and its impact on student outcomes. In the following section, I will discuss and summarize how different conceptualizations of racial climate are related to different educational outcomes.

1.3.1 Attitudes and Perceptions

Some studies define campus racial climate regarding attitudes and perceptions of individuals regarding race and diversity. An example would be whether students think the university encourages respect for cultural differences. Tynes, Rose, and Markoe (2013) define racial climate as "attitudes perceptions, behaviors, and expectations around race, ethnicity, and

diversity.” In their study, online discrimination and discrimination-related stress were related to a more negative view of the college racial climate (Tynes, Rose, & Markoe, 2013).

Similarly, Chavous (2005) defines racial climate as “beliefs, attitudes, values, and expectations shared by students at the institution that are sustained over time.” The study examined the extent to which perceptions of the racial climate were related to social integration, psychological integration, and intergroup attitudes. For African American students, specifically, more positive views of the racial climate were related to participating in more group-affirming or diverse organizations and an increased sense of community (Chavous, 2005).

Rankin and Reason (2005) define racial climate as “the current perceptions and attitudes of faculty, staff, and students regarding issues of diversity on a campus.” In their study, they found that students of color reported more experiences of racism and observations of harassment. They also viewed the climate as more hostile and racist in addition to viewing the classroom as less welcoming for students of color. Students of color were more likely to feel that the campus climate was getting worse and that the university did not appropriately address racism (Rankin & Reason, 2005). While these definitions tap into the perceptions and attitudes that individuals have regarding race and diversity, it is not clear what aspects of race and diversity these definitions may be identifying. Additionally, there is not consistency in whether racism is considered part of campus racial climate or a separate construct.

1.3.2 Experiences with Racism

Other scholars define racial climate as experiences with racism and discrimination on campus. An example of this would be whether students experienced racial insensitivity from other students on campus. Museus, Nichols, and Lambert (2008) refer to this definition: “experiences with prejudice and discrimination on campus and in the classroom.” They

examined how campus racial climate influences degree completion and whether there were mediating factors in this relationship. For Black students, racial climate was positively related to their academic and social involvement on campus and their commitment to their goals and institution. Greater satisfaction with racial climate (fewer experiences with discrimination) was also indirectly related to on-time degree completion through its relationship with academic involvement (Museus, Nichols, & Lambert, 2008). While racism and discrimination are certainly relevant aspects of the racial climate of a campus, there are additional factors such as how students interact with one another across racial lines. Further, defining racial climate as experiences with racism, attitudes, and perceptions is limiting because these conceptualizations only address the individual dimension of racial climate. Racial climate also includes interactions and relationships between individuals.

1.4 Interracial Interactions

Studies have also defined racial climate in a way that includes interracial interactions. An example would be the frequency with which students interact with students of different racial and ethnic backgrounds. Johnson, Wasserman, Yildirim and Yonai (2014) found, specifically for students of color, having comfortable academic interactions was related to less academic stress and more positive perceptions of the campus environment. Also, more interactions outside one's own racial/ethnic group were related to less intent to return to school. This may indicate that interracial or interethnic interactions may have been largely negative and a high frequency of these interactions may have led students of color to be less likely to return (Johnson, Wasserman, Yildirim, & Yonai, 2014). Many studies that operationalize racial climate as interracial interaction do not include interactions with faculty and staff.

Different operationalizations of racial climate exist and each has its distinct relationship with student outcomes. Studies defining racial climate as attitudes and perceptions related to race and diversity suggest that students of color broadly, and African Americans specifically, have more negative views of the racial climate at their institutions. Studies that define it as experiences with racial discrimination find racial climate has a significant impact on the academic achievement of African American college students. Racial climate, as interracial interactions, impacts students' perceptions of the broader campus climate and the amount of stress they experience. Research illustrates the effect of campus racial climate on student outcomes, yet work needs to be done to improve the campus racial climate for African American students. Much of the research fails to consider the systemic aspects of racial climate and how such these systemic factors promote injustice on college campuses. A social justice perspective is necessary to properly examine racial climate and develop an appropriate measure for African American students.

1.5 Racial Climate from a Social Justice Perspective

Operating from a social justice perspective is useful for understanding the experiences of African Americans in higher education, particularly as it relates to campus racial climate. Much of the racial climate research has only focused on the individual level (attitudes, interracial interactions, experiences with racism) so it helps to consider institutional factors such as the fair allocation of resources (programs, organizations, and funds with the goal of supporting students) and fair representation (institutional practices and policies related to race and diversity) on college campuses (Kloos, Hill, Thomas, Wandersman, & Dalton, 2012). Applied to racial climate, fair allocation of resources would refer to whether opportunities and resources are distributed equitably among racial groups on the campus and fair representation would refer to

whether there is fair representation among members of various racial groups in decision-making processes on campus. An example of this would be a program developed with the needs of African American students in mind (Lewis, Sullivan, & Bybee, 2006). Examining racial climate from this perspective also allows for the consideration of the institutional level factors that affect the distribution of resources and the representation of African Americans in decision-making processes. Racial climate has been conceptualized and operationalized at the individual level (attitudes, racism, interactions) and such definitions do not address the systemic aspect of racial climate, which is important from a social justice perspective. Thus, I will include these individual level factors and add the institutional level factors to measure fair allocation and fair representation.

Before campus racial climate can be measured as a construct, it must be defined. This proposed definition is based on previous research, a social justice perspective, and Jones' (1997) model of racism. I define campus racial climate as perceptions of the overall racial college environment in regards to its reproduction of social inequalities along racial lines, which includes these dimensions: quality of interracial interactions among students of various racial and ethnic backgrounds, experiences with racism on campus, attitudes that people have toward African American students, and the policies and practices universities implement in support of African American students. Before moving ahead with racial climate research using this definition, I will address several limitations first.

1.5.1 How to Measure Racial Climate?

Existing measures of racial climate are insufficient. One issue is the use of single item measures. Museus et al. (2008) assessed racial climate with a single "yes or no" item asking participants if they were satisfied with the campus racial climate. This method is particularly

problematic given the very broad and vague definition of racial climate that they used in the study. Additionally, this item assesses the satisfaction with the racial climate rather than anything more substantive. Such a form of measurement gives very little information about something as complex as an institution's racial climate. A single-item measure cannot capture the complexity of a multidimensional construct such as racial climate.

Other measures have multiple items and subscales, but are unidimensional, failing to adequately capture the multidimensional nature of racial climate (Cabrera et al., 1999; Fischer, 2010). For example, Locks et al. (2008) examined racial climate as interracial interactions, using one item that assessed perceptions of racial tension, three items that examined the frequency of positive interactions with diverse peers, and an item that examined the frequency of anxious interactions with diverse peers. All the items in this measure tap into the same dimension of interracial interactions. While this is an improvement over the single item measure, such measurement still fails to capture the multidimensional nature of a setting-level phenomenon like campus racial climate. While some measures are indeed multidimensional, they do not include institutional factors.

1.6 Examination of Institutional Level Factors

Existing measures also fail to tap into institutional factors that are related to concepts of fair representation and fair allocation of resources. Some studies include racial climate measures that assess perceptions of university or institutional norms regarding race, ethnicity, or diversity, but they do not refer to how resources, opportunities, and power distributed at the university (Rankin & Reason, 2005). Both versions of the School Interracial Climate Scale (Chavous, 2005; Green, Adams, & Turner, 1988) include aspects of the institution encouraging interracial interactions; however, they do not tap into institutional level practices and policies such as the

distribution of resources to students from different racial backgrounds and whether there is fair representation across racial groups in various levels of the institution. Ancis, Sedlacek, and Mohr (2000) used the cultural attitudes and climate questionnaire (Helm, Sedlacek, and Prieto, 1998) to assess racial climate. The measure consisted of 11 subscales (e.g. perception and experience of racial conflict on campus, comfort with racially/ethnically similar and dissimilar faculty and peers, sensitivity to racial/ethnic differences), but it lacks an assessment of institutional practices or norms.

Institutional level factors are lacking in many of the previously mentioned measures. Such institutional factors may include the racial composition of setting members (i.e., students, faculty, staff, administration), programs and services available for African American students, and the recognition of accomplishments by African American students. These institutional level factors are important when considering racial climate at a setting level. Fischer (2010) found that Black students with a higher number of Black professors earned higher GPAs than Black students who did not. To succeed, African American students must believe that they are in a setting that allows them to have positive interactions with their peers and professors. For example, involvement with faculty predicts higher GPA for African American students (DeFreitas & Bravo, 2012) and African American students report that same race peer groups provide support and strength (Kniess, Havice, & Cawthon, 2015). Universities must have policies and practices in place that enable these positive interpersonal interactions.

African American students also need to be in an environment that promotes their personal growth. Brooks, Jones, and Burt (2013) found that retention programs created for African American males improved their adjustment to college and their academic performance. Rodgers and Summers (2008) also posited that African American campus organizations help African

American students to become more integrated into the broader campus environment.

Universities should be responsive to the needs of African American students and willing to make changes to meet those needs through means such as introducing more culturally-relevant pedagogy (Hall & Martin, 2013) and creating networks for African Americans on campus (Grier-Reed, 2010). Too often, such needs are not met and the environment does not promote positive development for African American students (Johnson-Ahorlu, 2013; Solórzano et al., 2000).

Fairness may be an issue of whether the racial composition of faculty and staff matches that of the student body. It can also be whether programs that serve African American students receive the same amount of funding and resources in comparison to those that serve students of other races and ethnicities. These are objective factors that can be quantified, but it is also important to consider more subjective factors such as whether African American students perceive equal and fair treatment at an institutional level. Such institutional level factors are also important as they are related to social justice. These factors play a large role in the allocation of resources, opportunities, and power to African Americans on a college campus. To identify the most relevant factors for African American college students, I used group interviews to illuminate their views on what constitutes positive racial climate.

1.7 Current Study

There has been a significant amount of research on campus racial climate and the effect on student outcomes, but several limitations exist in the literature. First, there is significant variation in both the definition and measurement of campus racial climate across studies. Second, most studies examine racial climate with mostly White samples or samples in which the largest group is White students. Third, much of the racial climate research is comparative in nature, with White students serving as a reference group. Finally, many of the comparative

studies conflate all students of color into one comparison group, even though students of different races and ethnicities do not have the same experiences on college campuses.

The purpose of this study was to fill these gaps in the campus racial climate literature by developing and validating a campus racial climate measure specifically for African American college students. This newly developed measure will identify what aspects of campus racial climate are most relevant for African American college students. Additionally, this study extends the research on campus racial climate by examining it from the perspective of social justice (fair allocation of resources, opportunities, and power). The study employed a mixed-methods (group interviews and surveys) design to meet several main aims.

1.7.1 Study Aims

The first aim of the study was to construct the items for the racial climate measure. I conducted group interviews in which students described what they think racial climate is and what constitutes a positive or negative racial climate. Participants' responses were coded using thematic analysis and were used to construct items for the measure. The second aim of the study was to identify the factor structure of the measure, identifying possible subscales for the measure. The study collected survey data to identify possible subscales for the measure. I conducted exploratory factor analysis to identify the factor structure of the items. The third aim of the study was to confirm the factor structure. Confirmatory factor analysis was conducted to determine whether the factor structure remains the same from the previous step. Then, I tested the measure to determine if it was reliable (internal consistency), correlated with previous racial climate measures (convergent validity), associated with theoretically related constructs (criterion validity), and if it was unrelated to constructs it should not be related to (discriminant validity).

2 METHODS

The study employed a mixed-methods design, specifically a sequential transformative strategy. In this research design, the qualitative and quantitative phases occurred sequentially. A sequential transformative strategy is guided by a theoretical perspective such as race or gender that aims at exploring a problem. It also emphasizes collecting data from marginalized groups and ends with a call to action (Creswell, 2009). The first phase of the project included group interviews and then the quantitative survey followed. Responses from the group interviews were used to develop the questions for the racial climate measure. In addition, the measure was developed based on the input and experiences of African American college students. The project had the goal of developing a measure that would assess the collegiate experiences of African Americans and to improve those experiences. To do this, I constructed the measure using a series of steps based on the best practices recommended by Worthington and Whittaker (2006): generating an initial item pool, sending the initial item pool to experts for review, administering the measure to the proposed sample, evaluating the items, and optimizing the length of the scale.

2.1 Participants

African American undergraduate students at Georgia State University participated in the study. Georgia State University (GSU) was an appropriate data collection site given its significant African American population (35%) and the racial/ethnic diversity of the student population. While Georgia State University does not have the same type of racial and ethnic demographics as other public universities, its diverse student body more closely resembles the current and future demographics of the country and may better reflect African Americans' racialized experiences outside of the university setting. I recruited participants through the GSU Psychology department's research and testing site (SONA), departmental email lists, classroom

visits, and through African American student organizations. To qualify for the study, participants must self-identify as African American or Black, currently enrolled at GSU, and fluent in English. Participants could only participate in one component of the project (either group interview or online survey).

2.2 Procedure

The study employed a mixed-method design using group interviews to identify possible items for the racial climate measure and surveys to collect data to validate the measure. For both phases, I recruited participants from SONA, departmental email lists, and through African American student organizations. Upon IRB approval, a study description was placed on the SONA system. Email announcements and flyers were distributed to eligible students. Recruitment materials outlined the purpose of the study, inclusion criteria, and incentives (research credits).

2.2.1 Item Development Phase

I conducted five group interviews that lasted for approximately an hour. Hughes, Seidman, and Williams (1993) stated that group interviews are helpful to researchers when determining whether a construct is adequately conceptualized or relevant for a cultural group. They also discuss how constructs can take on different meaning and levels of importance for various racial and ethnic groups. If researchers do not establish methodological equivalence ahead of time, then there is no way to be sure if apparent differences are true differences or byproducts of the measure itself (Hughes, Seidman, & Williams, 1993). Thus, group interviews have been used in previous research to develop culturally relevant instruments (Hughes & DuMont, 1993; Willgerodt, 2003). Using this method also ensured that the items were written in participants' language.

I recruited 16 African American students (13 women, 3 men). The mean age of the sample was 19.69 (SD = 2.25). Most the participants identified their ethnicity as African American (N = 14), one participant identified as Caribbean/Afro-Caribbean, and one participant identified as African. Most the sample identified as straight/heterosexual (N = 14); two participants identified as bisexual. All the participants reported being single. Most participants were born in the United States (N = 13) and grew up in the United States (N = 14). The largest group of participants stated they were unemployed (N = 7), followed by employed part-time (N = 6), and employed full-time (N = 3). Most participants were freshmen (N = 11), followed by sophomores (N = 3), and juniors (N = 2). Half of the participants reported a household income over \$50,000.

Participants received registration packets with consent forms and demographic questions (i.e., age, gender, sexual orientation, ethnicity, year in college). The consent form gave participants contact information for the study principal investigator and instructions to contact the PI if there is any negative experience or distress due to their participation. Additionally, students were provided with information for mental health referrals and be informed about the possible cost of seeking mental health services. I asked participants to provide their name and e-mail address to receive their compensation, but this information was kept separate from the group interview transcripts to ensure confidentiality.

I wrote detailed notes and memos throughout the duration of the group interviews and coding process. In the notes and memos, I recorded my decision-making processes. I also took notes during group interviews to record possible emergent themes, followed up questions to participant responses, and took note of my emotions during the group interviews. It is important to take note of my emotions to document and understand how my emotional reactions may have

influenced the group interviews. Additionally, I wrote memos and notes during coding to record how I decided on codes and themes in the data. This note taking process ensured accountability to rigor and acknowledgement of potential biases that could have affected data collection and interpretation.

2.2.1.1 Group interview questions.

Participants were asked to describe what they believe can be done to improve the campus experiences of African American college students (see Appendix A). I asked participants to report on how interracial interactions, experiences with racism and attitudes towards African Americans impact their experience. Additionally, I asked what policies and practices they believe that college can implement to improve the racial climate on campuses for African American students. Finally, students gave their opinion on how a racial climate measure will be received and provide their definition of racial climate.

2.2.1.2 Data management.

The group interviews were audio recorded and transcribed. Audio recordings were downloaded to a password- and firewall-protected computer in a locked research lab. I placed all forms with participants' names in a locked file cabinet in the research lab. A de-identified dataset contains demographic information and responses to the questionnaire. I de-identified the transcripts and gave participants an identification number.

2.2.1.3 Coding.

I coded the group interviews using thematic analysis, a qualitative method for finding and analyzing themes within data. I used NVivo 10 to code the group interviews. The analysis followed guidelines provided by Braun and Clarke (2006): a combination of inductive and

deductive approaches. Inductive coding allows for themes to develop from the data instead of fitting a specific theory or framework. An inductive approach allows for alternative components of racial climate to be identified in addition to those already defined in previous studies.

Analyses also included deductive coding because it takes into consideration the previously established dimensions of campus racial climate. Identified themes were semantic in nature, meaning identification derived from the explicit meaning of the data and what participants state.

The group interviews were transcribed verbatim from the audio recordings. After transcription, I used open coding to develop the initial codes which allow for the codes to emerge from the data instead of using a pre-determined coding scheme. Initial codes came from key phrases and words that communicate some aspects of campus racial climate. After the generation of initial codes, I categorized the codes into potential themes. Subthemes may also emerge from the group interview data. After development of the themes, coded passages from the transcribed group interviews were mapped onto the themes. The themes were reviewed by examining all the passages within them and determining whether a coherent pattern emerged. During this stage, themes may be broken up into separate themes or merged into larger themes. Ideally, there is both a connection between and a distinction between the themes. If the themes met a coherent pattern based on the coded passages, then I examined the themes as they relate to the entire dataset. I used the resulting thematic map to refine themes by checking it against coded passages and the entire dataset. The themes were given definitions and names by referring to coded passages and using them to create a consistent account of the themes. During this stage, the data were analyzed within these themes, identifying the aspects of campus racial climate the themes represented.

2.3 Measure Validation

The sample consisted of 334 African American undergraduate students (N = 175 for exploratory factor analysis, N = 159 for confirmatory factor analysis). I split the sample into two smaller, randomly constructed samples using the split file function in SPSS 23. The sample size allows for adequate statistical power to conduct both sets of analysis (Wolf, Harrington, Clark, & Miller, 2013). Additionally, Worthington and Whittaker (2006) suggest a sample size of 150 to 200 can be adequate with factor loadings above .40 and ranging from 4 to 10 items per factor. The .40 cutoff is lower than the current study's cutoff for retaining items (.50 as explained in the Exploratory factor analysis subsection).

2.3.1 Measures.

Participants provided information about demographic characteristics (i.e. age, gender, sexual orientation, ethnicity, classification, employment status, income). I selected the measures described below because they have been used in previous studies on campus racial climate. I used these measures to assess convergent validity, discriminant validity, and criterion-related validity. Convergent validity occurs when the measure correlates strongly with other measures that assess the same construct. Discriminant validity occurs when the measure correlates less strongly or not at all with measures that assess distinctly different constructs. Criterion-related validity occurs when the measure is related to an expected outcome (Morling, 2012).

2.3.1.1 *Campus Racial Climate for African Americans Scale.*

The CRCAAS consists of 31 items that assessed African American college students' perceptions of the racial climate at their institutions (1 = *Strongly Disagree* to 5 = *Strongly Agree*). Several items were reverse coded. Higher scores indicate more positive perceptions of the campus racial climate.

2.3.1.2 Convergent validity.

Racial climate was examined using the Campus/Racial Climate Scale (Cabrera et al., 1999; $\alpha = .79$) which is a four-item measure. Responses were scored on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). I used this measure of racial climate to validate the racial climate measure developed from the group interviews. I included this scale because of its use with a sizeable African American sample and it is one of the few measures for which there was previous reliability information specifically for African Americans ($\alpha = .75$). These items gauge the extent to which the student “heard negative words about minorities while attending classes,” “believed students were prejudiced against minorities,” “observed discriminatory words, behaviors, or gestures directed at minority students,” and “thought that instructors treated all students the same regardless of race.” Total scores for the measure are calculated by using the mean of the item responses. Higher scores indicate more negative perceptions of the campus racial climate.

2.3.1.3 Discriminant validity.

General campus climate (Reid & Radhakrishnan, 2003; $\alpha = .76$) was examined using a four-item measure that assessed students’ perceptions of the overall campus climate. I included this scale to test the discriminant validity of the proposed racial climate measure because of its established relationship with campus racial climate (Reid & Radhakrishnan, 2003). Although campus racial climate and general campus climate are related constructs, they are distinct constructs and the relationship between the two should not be too strong as that would indicate they are not distinct from one another. The measure is scored on a seven-point Likert scale (1 = strong disagreement to 7 = strong agreement). Sample items include “In general, I fit in with other students here” and “If I had to do it all over again, I would still attend the university.”

Total scores for the measure are calculated by using the mean of the item responses. Higher scores indicate more positive perceptions of the general campus climate.

2.3.1.4 *Criterion-related validity.*

2.3.1.4.1 Sense of belonging.

Sense of belonging (Johnson, 2012; $\alpha = .88$) was measured using a five-item scale assessing the extent to which students feel that they belong to their college (i.e., I feel a sense of belonging, I feel that I am a member of the campus community, I feel comfortable on campus, I would choose the same college over again, and my college is supportive of me). I included this scale to test the convergent validity of the proposed racial climate measure because of its established relationship with campus racial climate (Johnson, 2012). The measure is scored on a four-point Likert scale (1 = strongly disagree to 4 = strongly agree). Total scores for the measure are calculated by using the mean of the item responses. Higher scores indicate a greater sense of belonging to their institution.

2.3.1.4.2 Academic environment stress.

Academic environment stress (Johnson, Wasserman, Yildirim, & Yonai, 2014; $\alpha = .79$) was measured using six items (negative classroom environment, poor relations with instructors, making connections with instructors, in a major I do not like, difficulty getting the help/advice I need in my school/college, lacking connection to my school/college) assessing the extent to which students felt stress related to the academic environment. I used this scale to test the convergent validity of the proposed racial climate measure because of its established relationship with campus racial climate (Johnson, Wasserman, Yildirim, & Yonai, 2014). The measure is scored on a four-point Likert scale (1 = No Stress to 4 = Severe stress). Total scores for the

measure are calculated by using the mean of the item responses. Higher scores indicate higher levels of stress related to the academic environment.

2.3.1.4.3 Multidimensional Inventory of Black Identity.

Racial identity was measured using the private regard, public regard, and centrality subscales of the Multidimensional Inventory of Black Identity (Sellers et al., 1997). I included this construct to test the criterion validity of the proposed racial climate measure because of its established relationship with campus racial climate (Hurtado, Alvarado, & Guillermo-Wann, 2015). For the private regard ($\alpha = .85$) subscale, participants reported how positively they felt about being Black (i.e., I am happy that I am Black). Higher scores indicate more positive feelings about African Americans. For the public regard subscale ($\alpha = .81$), individuals reported how positively they felt others viewed African Americans (i.e. In general, others respect Black people). Higher scores indicate more positive feelings about African Americans that others have. For the centrality subscale ($\alpha = .79$), participants reported how closely they identified with being Black (i.e., I have a strong sense of belonging to other Black people). Higher scores indicate a stronger identification with being Black. Responses ranged from (1) strongly disagree to (7) strongly agree. Total scores for the subscales are calculated by using the mean of the items.

2.4 Data Analysis Plan

2.4.1 *Missing data.*

All statistical analyses were performed using SPSS and Mplus. I conducted an analysis of the missing data and found that no variable had 10% missing data. For the full sample, 95.81% (N = 320) of the participants had complete data. I tested the data for cases being

completely missing at random. Data that is missing completely at random (MCAR) occurs when the likelihood of missing data is due to mere circumstance or variables outside of the study; it is not due to observed data or unobserved data (Schafer & Graham, 2002). Little's MCAR test was not significant, $\chi^2(353) = 333.92$, $p = .76$. This indicates that the data is missing completely at random. Data imputation was unnecessary due to the small percentage of missing cases and because the data was missing completely at random.

2.4.2 Exploratory factor analysis.

I conducted an exploratory factor analysis with half of the sample to determine the factor structure. Exploratory factor analysis estimates factor loadings for each variable on each possible factor. First, I examined the factorability of the correlation matrix. Since there were more than five cases per item, I used the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. This method determines whether there are actual factors or chance correlations among a group of items (Worthington & Whittaker, 2006). The factor extraction method was principal axis factoring with oblique rotation. Oblique rotation methods are appropriate for factors that are expected to be intercorrelated (Osborne & Costello, 2009). I expected the factors to be correlated because the resulting subscales would assess related aspects of campus racial climate. Principal axis factoring was appropriate because of the examination of the factor structure with single-item indicators rather than the subscale indicators (Kline, 2011). To decide the number of factors to retain, a scree test was conducted, which involves examining a graph of the eigenvalues to determine where the graph breaks or begins to flatten out. The points above the break indicate the number of retained factors; I also retained factors based on whether their eigenvalues were greater than 1 (Kline, 2011).

I dropped items with factor loadings lower than .50 and factors with fewer than three items. The standard convention for retaining items is to drop items with factor loadings below .32 and factors with fewer than three items because such items and factors are weak and unstable (Osborne & Costello, 2009). Osborne and Costello (2009) additionally recommend that factors contain at least five items with factor loadings of at least .50. To keep the measure at an optimal length that limits participant fatigue and allows a stable factor structure, I used this more stringent (.50 rather than .30) factor loading cutoff point for retaining items. This is because one of the factors which the item cross-loads onto may be deleted or collapsed into another factor, allowing for the item to be retained (Worthington & Whittaker, 2006).

2.4.3 *Confirmatory factor analysis.*

I conducted a confirmatory factor analysis with the remaining sample to validate the factor structure of the measure. The variances of each factors identified in the EFA were set to 1.0 to standardize the factor loadings. Unlike in exploratory factor analysis in which all items can load onto all factors, I allowed the items load onto only one factor each. Model fit was examined using the standardized root mean square residual (SRMR), root mean square error of approximation (RMSEA), and the comparative fit index (CFI). I used the criteria of good fit outlined by Schreiber, Nora, Stage, Barlow, and King (2006) as well as by Hu and Bentler (1999). Models with good fit have SRMR with a value less than .08, RMSEA from .06 to .08 (Schreiber, Nora, Stage, Barlow & King, 2006), or CFI close to .95 (Hu & Bentler, 1999).

2.4.4 *Internal consistency, convergent, discriminant, and criterion validity.*

I examined the internal consistency (reliability) and validity of the individual subscales. For convergent validity of the measure, I assessed the correlational relationship between the new measure and the Campus/Racial Climate Scale (Cabrera & Nora, 1994; Cabrera et al., 1999). I

tested discriminant validity by examining the correlational relationship between campus racial climate and general campus climate. The measure will demonstrate discriminant validity if it is weakly correlated or uncorrelated with general campus climate. Finally, for criterion-related validity, I tested campus racial climate's predictive relationship with sense of belonging, racial identity, and academic stress using regression analyses. Previous research has suggested campus racial climate's relationship with these constructs (Johnson, 2012; Johnson, Wasserman, Yildirim, & Yonai, 2014; Reid & Radhakrishnan, 2003).

3 RESULTS

3.1 Focus Group Themes

Initial codes were identified and organized into five initial themes: institution, attitudes, racism, sociopolitical environment, and interracial interactions. Coded passages were mapped onto the preliminary themes and were reviewed to ensure they aligned with the themes. I also identified subthemes based on the coded passages. The preliminary themes of racism and sociopolitical environment were merged into the interracial interactions theme because they were not referenced enough nor distinct enough from interracial interactions to warrant them being their own themes. Based on the revised thematic map, I coded the transcripts once more and revised the themes and subthemes a final time to create the thematic map (see Appendix B). The themes and subthemes are as follows.

3.1.1 *Institution.*

This theme refers to the characteristics, practices, and policies within the structure of the university that promote racial/ethnic diversity, multiculturalism, and the support of African American students at multiple levels of the institution. Students talked the benefits and presence of racial and ethnic diversity on college campuses. Students also discussed the events, programs, and organizations on campus that promote multiculturalism and cross-cultural understanding. It was important to many students that there are policies and practices in place that demonstrate the university's commitment to African American students. Six subthemes emerged from the data: diversity, supporting Black students, organizations, events, curriculum, and representation and recognition. Diversity refers to the racial and ethnic make-up of the student body on the college campus. Students often mentioned that Georgia State was a very diverse school with more diversity than many other schools. They referred to diversity both as a large African American

student population and as a student body of multiple racial and ethnic groups. One student mentioned the benefits of such diversity.

I think that one thing I have felt about Georgia State is that it is very diverse, you know, for the south, it is very diverse in a certain. I think that the freedom of speech or the freedom of expressing yourself in a certain way is pretty open here.

A second subtheme was that of supporting Black students. This theme refers to actions by the university that demonstrate a commitment to African American students and their well-being. Students referred to programs and offices that provide resources and support to African American students. A female student said that she wished the university would take a more proactive stance in the current political climate.

But it would be nice to see Georgia State to make a stance on what's going on racially, like even if you voted for Donald Trump and can see where he's coming from, the way African Americans are being treated in this day and age is not correct. We're being treated like animals in these situations or people are these violent beings that don't like peace. I would like to see Georgia State make a stance on these, like hold a rally we could to or protest peacefully or allow peaceful protest. I would just like to see them make a stance and say "hey this is not ok and if you also feel that this isn't ok, you can come and support this.

Organizations on campus emerged as another subtheme. Students talked about student clubs and organizations that either promote multiculturalism or cater to African American students. One female student discussed the need for clubs and organizations that help people understand African Americans' experiences.

Okay so um, like what she said back thinking about what you said like, yes there are like clubs called like African-American studies or whatever. But at the end of the day, anybody should be able to come in there, you know, learn or, you know, try to better themselves. It shouldn't just be, like, all just African-Americans. Other people should be able to come and actually learn and experience from, like ... Even though they can't really experience what African-Americans go through or understand it, they should want to, like, under ... They should want to understand them basically. That's what I think.

Students also discussed events hosted at and by the institution that promote cross-cultural understanding. One student mentioned the benefits of hosting a seminar that promotes acceptance and showing respect to people from difference backgrounds.

Maybe hold a seminar on how not to treat Black individuals? I don't know, it's kind of frustrating because I don't feel like that's necessary. I feel like they should just view us as people, but if they don't want to view us as people, if they want to have these biased things about us, then maybe they do need seminars to tell them "you can treat this person as a person." Everybody has that first "oh I think they're this kind of person." But once the person shows you they're not that kind of person or if you're having an articulate conversation with that person, you should acknowledge that and that should bring up some sort of respect for the person, which I don't think that happens here, but that could be something that could help I guess.

The topic of classroom curricula emerged as well. Students discussed the relevance of course material to the experiences and accomplishments of African Americans. Many participants remarked that they wish the curriculum included more African American history and

contributions. One student noted the benefits taking an African American studies course for both African American students specifically and the whole student body.

Just like the African-American studies class that we have here at GSU. I feel like um other races should take that class, you know, as something that they learn so they go through and they learn about it. Because even as an African-American, like there are things that I didn't even know about the past that African-Americans went through. Like, I think that class was beneficial for both sides.

Representation and recognition emerged as another subtheme. Participants discussed the roles that African Americans take within the structure of the university and how they are acknowledged for their accomplishments. Per students, African Americans are recognized for their accomplishments frequently.

Yeah that is true. I do feel like I have seen in the emails they send out like all the time about this person's getting awarded, I feel like I do see a good amount of it being black students and a good amount of it being [crosstalk 00:21:40] other races.

Although recognition of accomplishments is given, students also noted places where the university could improve. The lack of African American professors was a point that came up several times over the course of the group interviews. One student mentioned "I haven't had one African American professor since I've been here." Students also noted that the upper administration did not reflect the racial and ethnic diversity of the student body, particularly as it relates to the African American population.

And when I see the people that run GSU, they are white when you look at it. Like, they're including a lot of African-Americans, but we're the ones making the food and we're driving the buses at the same time (laughs).

3.1.2 *Attitudes.*

This theme encompassed beliefs that individuals hold about African American students and the impact of those attitudes on African American students. Three subthemes emerged: stereotypes, expectations, and going above and beyond. The subtheme of negative stereotypes that individuals hold about African American students was predominant. One stereotype that students repeatedly mentioned was their intellectual inferiority.

For people to see me this as good as the white girl or the Asian girl cause they just have the stereotype of being smart, and white girls just have, they get their, I don't know, they're being white, you know? So the attitudes I guess people have about African-Americans, that we're not as good, we're not as smart ... Even when we're smarter. Like, the movie that came out this year *Hidden Figures*, about the two African-American women that put two people on the moon, like not two people, more than two people. But, you know, things like that make you see that we are just as smart. So I guess the that is the attitude that people have. Or we're lazy, you know?

The subtheme of expectations refers to the low expectations people have of the attitudes and performance of African American students. One student remarked how people are surprised when an African American student shows their intellect.

I don't even know. I guess just not look at us like we're dumb. It just annoys me. In some classes, if I say something that has good vocabulary or whatever they'll be like "oh my god, how do you know those words?" Why wouldn't I know them? I just feel like they have just low expectations just for black individuals in general. Whenever we show we have even one shred of intelligence it's like "oh my god look! There's one of them that actually knows how to think and use their words." That goes back to the fact that I think

they view us as animals. I don't see me looking at another human being and being like "how do you know all those words? How do you articulate so well?" I don't understand it.

The third subtheme was going above and beyond. Students talked about feeling as though they had to work harder in response to negative attitudes and stereotypes held about African American students. Some stated that African American students could pay a high price for not excelling; one student mentioned that African American students could not afford to be mediocre.

I feel like as a black student, we can't be mediocre. Like you either ... Like you have to go above and beyond. You have to do everything your teacher says. You have to be on top of everything and if you're not, you get written off and I, I've seen that a lot from like my friends, to me. That I've even ... I don't even know where I got this thing, where I have to do everything.

3.1.3 *Interracial Interactions.*

This theme consists of day to day interactions that African American students have with students of other races and ethnicities and that students of all races and ethnicities have across racial lines. Some students mentioned the negative impact recent societal issues have on the campus environment and racial tensions that are increasing. Students also discussed witnessing and experiencing instances of overt or explicit racism. One student described how she was denied service at an on-campus restaurant.

Um, well one time I was in Moe's and this lady she tried to tell us that like it was closed, but then this white girl walked by and she was trying to get in and she said it was open for her so, yeah.

Another student described an instance in which two White students refused to eat food cooked by an African American.

I went to Georgia Gwinnett my first two years and then I transferred here last semester and so when I was at GGC, I was at line in Panda Express and then there was these two white guys behind me and we had a Black cook and a White cook and I guess they switched shifts and so the Black cook was cooking now and so the two White dudes behind me were like "oh I'm not eating here since that Black dude's cooking" and they left.

Students also discussed how comfortable individuals feel interacting with people outside of their own racial or ethnic group.

I don't feel like it happens like they're thinking about it, but I feel like, just kids are drawn to people of their kind. I try not to be like that, I have friends of all races. There are some kids that feel more comfortable being around other white kids, but to each their own, but that also falls in to why do they feel so scared around Black. That comes from society and like the media, like perpetuating that we're such violent creatures, just doesn't make sense. So yes to an extent, but they're not making a conscious decision to be segregated.

Participants also discussed the importance of establishing friendships and having conversations across racial lines and the difficulty of initiating them.

I think with in- Uh, inter-racial conversations, it does fall back into um, am I comfortable with what I'm saying? Like is this person going to be offended by what I say? So I like having multi-racial conversations because I learn different um, view points on different things from people of all different types of backgrounds and I find that some

people um, are very careful about what they'll say, especially if it's over the topic of race or if it's over the topic of um, generals or even LGBT.

Students also noted the difficulty of relating to students of other racial backgrounds and whether African American students could be their authentic selves.

I feel like some people feel like they need to keep themselves together, sit a certain way, speak a certain way, think a certain way, treat people a certain way. You shouldn't, you are who you are. We need everyone in the world to come together. You need different personalities. You don't want to be the same person, it will be boring.

After developing the thematic map (see Appendix B), I used it to develop the content of the items for the measure. Figure 1 illustrates the process through which I constructed the measure. The wording of items was based on the group interview responses. First, I reviewed the interview transcripts and identified codes, then I selected the coded passages in the data that best reflected the core themes. Next, I constructed items that succinctly captured the semantic meaning of the coded passage. I attempted to change as little of the students' language as possible to properly reflect their words. The initial pool of items consisted of 25 questions.

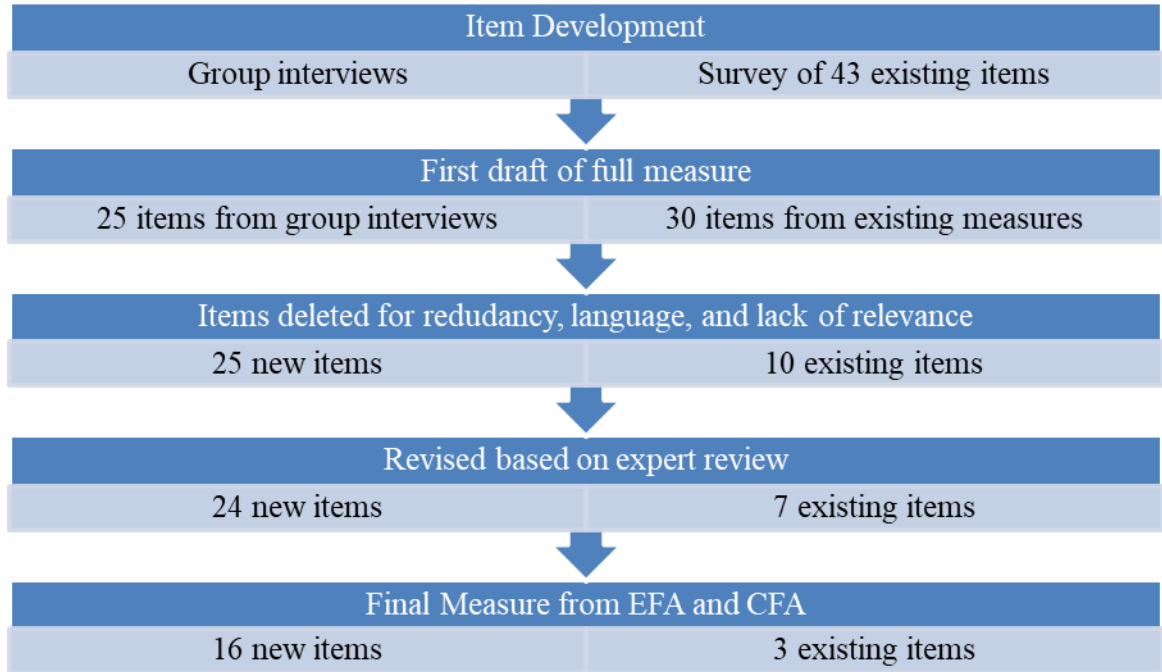


Figure 1 Item development process

Note: Dark blue indicates research stage; light blue indicates scale items at that stage.

Existing items taken from previously-developed measures; new items developed during this project.

3.2 Survey of Previous Items

A separate group of participants ($N = 23$) received a set of items from existing measure of racial climate. Participants completed the items by responding to how relevant items (1 = *Not relevant at all* to 10 = *Extremely relevant*) are to their experiences of racial climate (see Appendix C). Items with a mean endorsement under 5.00 were dropped as potential items. The initial pool began with 43 items and 13 items were dropped from the measure. These items were combined with the items developed from the group interviews. In the cases of duplicate items, I retained the items developed from the group interviews because they were written in the

language participants were most likely to use when they described experiences of racial climate. I dropped additional items from previous measures if the items reflected specific experiences that did not come up in any of the group interviews. The items reflected experiences such as dating and having roommates that were not specific to the educational context. These experiences may occur outside of the university setting. I deleted these items because there would not be a way to know definitively whether those items refer to experiences relevant to African Americans broadly across contexts or those specific to African American college students. This left 10 remaining items from previous measures. The resulting measure consisted of 35 total items (1 = *Strongly Disagree* to 5 = *Strongly Agree*); several items were reverse coded. Higher scores indicated more positive perceptions of the campus racial climate.

3.3 Expert Review

As suggested by Worthington and Whittaker (2006), I sent the measure (i.e., 35 items) to several experts in the field of racial climate research for review. I asked the experts to evaluate the items based on four criteria: content validity (Do the items reflect the construct of campus racial climate?), clarity (Are the questions clear in what they are asking?), conciseness (Are the questions understandable?), and redundancy (Are there multiple items that ask the same questions?). Based on feedback, four items were removed, leaving the scale with 31 items.

3.3.1 *Campus Racial Climate for African Americans Scale.*

The CRCAAS consists of 31 items that assessed how positively African American college students perceive the racial climate at their institutions (1 = *Strongly Disagree* to 5 = *Strongly Agree*). Several items were reverse coded. Higher scores indicate more positive perceptions of the campus racial climate.

3.4 Exploratory Factor Analysis

The sample consisted of 175 African American undergraduate students (143 women, 32 men). The mean age of the sample was 21.28 ($SD = 4.45$). Most of the sample identified their ethnicity as African American (77.1%), followed by Caribbean/Afro-Caribbean (10.9%), African (5.7%), and bi-racial/multiracial (6.3%). Most participants identified as straight/heterosexual (88.6%), followed by bisexual (8.6%), and homosexual/lesbian/gay (2.9%). Most participants were single (97.1%), 2.3% were married, and .6% were divorced. Most participants were born in the United States (89.1%) or grew up in the United States (97.1%). The largest percentage of participants stated they were employed part-time (48%), followed by unemployed (34.9%), employed full-time (12.6%), and other (4.8%). The largest group of students was seniors (38.9%), followed by juniors (28.6%), sophomores (25.1%), and freshmen (7.4%). Most participants (53.5%) reported household incomes of less than \$40,000.

The exploratory factor analysis resulted in a Kaiser-Meyer-Olkin (KMO) coefficient of .81, which suggested significant sampling adequacy. The factor extraction method was principal axis factoring. I entered 31 items into the exploratory factor analysis with a promax (oblique) rotation and set the analysis to extract factors with eigenvalues greater than 1. The analysis produced 5 factors with eigenvalues ranging from 1.00 to 7.62. The factors accounted for 24.18%, 9.18%, 7.256%, 5.78%, and 4.70% of the variance, respectively. I eliminated items with factor loadings less than .50, leaving five factors with 19 items. I dropped two factors because they had fewer than three items. I conducted a second exploratory factor analysis with the 19 items to determine whether the items from the two dropped factors would load onto the remaining three factors; I dropped two of those items from discarded factors because they had factor loadings less than .50. The final solution 17 items and three factors and I labeled them as

Factor 1: Institutional Factors ($M = 3.85$, $SD = .64$), Factor 2: Racial Experiences and Perceptions ($M = 3.16$, $SD = .76$), and Factor 3: Interracial Interactions ($M = 4.07$, $SD = .65$). Items for the Racial Experiences and Perceptions subscale were reverse coded so that higher scores indicated more positive perceptions and experiences related to race on campus.

Table 1 Exploratory Factor Analysis (N = 175)

Item	1	2	3
Factor 1: Institutional Factors			
The university has practices in place that support African American students.	.63	.08	.09
The university has organizations that support African Americans (clubs, fraternities and sororities, etc.).	.63	.05	-.05
The university hosts events that promote and celebrate diversity.	.68	.03	.13
The university hosts events that promote and celebrate African American culture.	.77	-.03	.02
There are courses available to me that focus on African American culture and history.	.60	-.07	.06
The university employs enough African American professors.	.62	-.03	-.21
African Americans are represented in high-ranking positions (faculty, staff, administration).	.58	-.04	-.12
African Americans are recognized for their accomplishments on campus.	.70	-.06	.07
Factor 2: Racial Experiences and Perceptions			
People on campus have negative stereotypes toward African American students. (R)	.03	.64	.05
People on campus have low expectations of African American students. (R)	.17	.70	.05
African American students must go above and beyond to get the same benefits as students of other races/ethnicities. (R)	.17	.48	-.11
People on campus use racial slurs and commit racist acts against African American students (refusing service, saying the N-word, etc.). (R)	-.08	.65	-.17
I only feel comfortable with other African American students. (R)	-.13	.60	.04
Students only feel comfortable in their own racial/ethnic groups. (R)	-.13	.65	.08
Factor 3: Student Interracial Interactions			
Students from different races and ethnicities attend social events together.	-.02	-.09	.69
Students from different races and ethnicities study together.	-.02	.05	.67
Students from different races and ethnicities do extracurricular activities together.	-.04	.02	.90

3.5 Confirmatory Factor Analysis

The sample consisted of 159 African American undergraduate students (131 women, 26 men, 2 identified as transgender). The mean age of the sample was 21.99 ($SD = 5.07$). Most of the sample identified their ethnicity as African American (80.5%), followed by Caribbean/Afro-Caribbean (8.2%), African (5.0%), and bi-racial/multiracial (6.3%). Most participants identified as straight/heterosexual (84.9%), followed by bisexual (11.9%), and homosexual/lesbian/gay (3.1%). Most participants were single (95.6%), 2.5% were divorced, 1.3% were married, and .6% were separated. Most participants were born in the United States (91.8%) or grew up in the United States (96.9%). Most participants stated they were employed part-time (59.1%), followed by 23.3% who were unemployed, 14.5 % were employed full-time (12.6%), and 3.1% stated other. The largest group of students were juniors (40.9%), followed by seniors (36.5%), sophomores (17.6%), freshmen (4.4%), and non-degree students (.6%). Most participants (57.6%) reported household incomes of less than \$40,000.

I conducted a confirmatory factor analysis with a second sample, using the MPlus 7.3 program (Muthen & Muthen, 2012). The hypothesized model consisted of three latent variables representing the three subscales (eight indicators for Institutional Factors, six indicators for Racial Experiences and Perceptions, and three indicators for Student Interracial Interactions). I used the criteria of good fit outlined by Hu and Bentler (1999) and Schreiber, Nora, Stage, Barlow, and King (2006): SRMR less than .08, RMSEA from .06 to .08, and CFI approximately .95 (Hu & Bentler, 1999). The initial model resulted in a CFI of .85, RMSEA of .09, and a SRMR of .08. I used modification indices to respecify the model (adding a path between items 7 and 8, adding a path between items 18 and 19). I added the two parameters because the Lagrange Multiple Modifier Indices were highest for the two parameters and questions in each

pair (7 & 8, 18 & 19) were very similar. The model demonstrated good fit with a RMSEA of .06, a CFI of .94, and a SRMR of .06.

3.6 Reliability and Validity

I tested the reliability and validity of the measure with the full sample ($N = 334$). Supporting internal consistency reliability, the measure produced a Cronbach's alpha of .84 ($M = 3.59$, $SD = .53$). Each subscale demonstrated acceptable internal consistency: Institutional Factors ($\alpha = .84$), Racial Experiences and Perceptions ($\alpha = .76$), Student Interracial Interactions ($\alpha = .82$). I tested convergent and discriminant validity by assessing the measure's correlation with the Campus/Racial Climate Scale and General Campus Climate. Measures will demonstrate evidence of convergent validity and discriminant validity jointly if the correlation with Campus/Racial Climate is stronger than the correlation with general campus climate. This follows the general rule of thumb that measures should correlate more strongly with similar items than with dissimilar items (Morling, 2012). To test convergent validity and discriminant validity separately, I used Cohen's (1992) guidelines for strengths of association to set a cutoff point. Correlations stronger than .30 (or -.30) will indicate convergent validity and correlations weaker than .30 (or -.30) will indicate discriminant validity. CRCAAS was significantly related to Campus/Racial Climate ($r = -.50$, $p < .001$) and General Campus Climate ($r = .49$, $p < .001$). Convergent validity with Campus/Racial Climate was supported, but not discriminant validity with General Campus Climate. Two of the subscales demonstrated convergent validity: Institutional factors ($r = -.32$, $p < .001$) and Racial Experiences and Perceptions ($r = -.52$, $p < .001$). None of the subscales demonstrated discriminant validity.

Table 2 Intercorrelations

	1	2	3	4	5	6
Average						
Subscale 1	.84***					
Subscale 2	.74***	.34***				
Subscale 3	.57***	.37***	.22***			
Campus/Racial Climate	-.50***	-.32***	-.52***	-.20***		
General Campus Climate	.49***	.42***	.34***	.32***	-.35***	

I tested criterion-related validity using simple linear regressions. Institutional factors significantly predicted academic environment stress ($\beta = -.20$, $t = -3.59$, $p < .001$), sense of belonging ($\beta = .41$, $t = 8.08$, $p < .001$), private regard ($\beta = .16$, $t = 1.81$, $p < .05$), and public regard ($\beta = .19$, $t = 3.53$, $p < .001$). Racial Experiences and Perceptions significantly predicted academic environment stress ($\beta = -.28$, $t = -5.28$, $p < .001$), sense of belonging ($\beta = .29$, $t = 5.53$, $p < .001$), centrality ($\beta = -.17$, $t = -3.16$, $p < .01$), and public regard ($\beta = .18$, $t = 3.32$, $p < .01$). Student Interracial Interactions demonstrated criterion-related validity with sense of belonging ($\beta = .27$, $t = 5.11$, $p < .001$), private regard ($\beta = .21$, $t = 3.75$, $p < .001$), and public regard ($\beta = .22$, $t = 4.02$, $p < .001$).

Table 3 Regression Analyses for Criterion-Related Validity

	Academic Environment Stress	Sense of Belonging	Private Regard	Public Regard	Centrality
	β	β	β	β	β
Institutional Factors	-.20**	.41***	.16*	.19***	.02
Racial Experiences and Perceptions	-.28***	.29***	.03	.18**	-.17**
Student Interracial Interactions	-.13	.27***	.21***	.22***	.03

* $p < .05$, ** $p < .01$, *** $p < .001$

The measure did not sufficiently demonstrate discriminant validity with general campus climate. Because of this, I conducted a series of hierarchical multiple regression to assess incremental validity. Incremental validity occurs when a measure contributes to an outcome above and beyond another measure (Maroof, 2012). For each analysis, I entered general campus climate into the first step and the CRCAAS subscales into the second step. The hierarchical regressions included the three subscales. The three subscales predicted above and beyond general campus climate: academic environment stress (R^2 change = .03, $F = 4.03$, $p < .01$), public regard (R^2 change = .06, $F = 7.29$, $p < .001$), and centrality (R^2 change = .05, $F = 5.98$, $p < .01$).

Table 4 Hierarchical Regression Analyses for Incremental Validity

	Academic Environment Stress	Sense of Belonging	Private Regard	Public Regard	Centrality
	ΔR^2	ΔR^2	ΔR^2	ΔR^2	ΔR^2
Step 1 General Campus Climate	.12***	.62***	.08	.02*	.01
Step 2 (Subscales) Institutional Factors Racial Experiences and Perceptions Student Interracial Interactions	.03**	.01	.02	.06***	.05**

* $p < .05$, ** $p < .01$, *** $p < .001$

4 DISCUSSION

The purpose of the study was to develop a measure of campus racial climate specifically for African American college students. I used theory, previous research, qualitative analysis, and quantitative analysis to develop the measure. This study extends the literature by developing a racial climate measure specifically for African American students and assessing campus racial climate across multiple ecological levels including the institutional level. The use of a social justice perspective highlights the importance of including African American students' voices in the development of the measure and in the consideration of racial climate at an institutional level. The present study utilized survey data to assess how relevant previous racial climate items were to the experiences of African American undergraduates. Of the initial 43 items, 13 items were dropped because African American students reported they were not very relevant to their experience with campus racial climate. Additionally, more items were removed from the pool if they reflected experiences that were not mentioned in any of the subsequent group interviews. Group interviews were conducted to develop new items for the campus racial climate measure. I used thematic analysis to analyze the group interviews and found three themes: Institution, Attitudes, and Interracial Interactions.

4.1 Campus Racial Climate Themes

Institution refers to the characteristics, practices, and policies within the structure of the university that promote racial/ethnic diversity, multiculturalism, and the support of African American students across multiple levels of the institution. Students' discussion around this theme highlighted factors that are usually considered separate from campus racial climate in the previous literature. They discussed the benefits of having organizations and programs that cater to African American students (Brooks et al., 2013; Kneiss et al., 2015; Rodgers and Summers,

2008). The presence of African American faculty was important for the participants as well, echoing the findings of Fischer (2010). The students also wanted the university to make a public stance on relevant social issues, which is not an experience reflected in any previous campus racial climate scales. The findings highlight the importance of institutional policies and structural factors that are critical to building a positive racial climate for African American students.

Attitudes encompassed perceptions of the beliefs individuals hold about African American students and the impact of those perceived attitudes and stereotypes on African American students. This theme captures the negative stereotypes that African American students face, specifically referring to their intellect. These negative stereotypes also lead to lower expectations of African American students, an experience that too many African American students experience within the educational setting (Eccles & Roeser, 2009; Solorzano et al., 2000). Students also believed that they had to work harder to overcome that stereotype. This theme as whole maps onto research involving stereotypes and stereotype threat (Johnson-Ahorlu, 2013; Steele & Aronson, 2008). African Americans students are burdened with stereotypes of their intellectual inferiority. This stereotype is coupled with low expectations of their performance. The fear of fulfilling this stereotype drives students to go above and beyond. For African American students, the campus racial climate may be a perpetual state of stereotype threat: having their identities threatened and attempting to cope with that threat.

Interracial interactions consist of day to day interactions that African American students have with students of other races and ethnicities and that students of all races and ethnicities have across racial lines. Students discussed the conversations and friendships they had across racial lines. These interactions took place both inside and outside the classroom. These experiences

are consistent with previous research examining positive interactions with diverse peers (Johnson, 2012; Locks et al., 2008). They also talked about the attempt to remain authentic and the difficulty of relating with students of other races or ethnicities. Relatability is an experience of campus racial climate not reflected in existing campus racial climate measures. Students also recalled witnessing or experiencing racist incidents on campus, an experience commonly cited by African American students (Cabrera et al., 1999; Johnson et al., 2014).

After careful examination of themes, I used the themes and selected passages to construct new survey items and combined them with relevant items from previous measures. Then, I sent the measure to experts to assess content validity of the items and four items were removed, leaving a total of 31 items for the measure.

4.2 Campus Racial Climate for African Americans Scale

Data from two samples indicated that the measure is reliable and valid for assessing campus racial climate. Exploratory factor analysis identified a three-factor solution with 17 items and confirmatory factor analysis with a second sample supported that the measure was acceptable. The three factors were Institutional Factors, Racial Experiences and Perceptions, and Student Interracial Interactions. The CRCAAS was correlated with Campus/Racial Climate indicating that measure is valid for assessing campus racial climate. The CRCAAS significantly predicted sense of belonging, academic environment stress, and racial identity demonstrating criterion-related validity. The overall measure demonstrated internal consistency with a high Cronbach's alpha (.84) and the subscales also demonstrated acceptable internal consistency (Cronbach's alphas above .76). The CRCAAS demonstrated stronger internal consistency than Campus/Racial Climate, indicating the CRCAAS may be a more reliable measure for this sample of African American undergraduates.

The CRCAAS is both similar to and differs from previously established scales of campus racial climate. Group interviews, exploratory factor analysis, and confirmatory factor analysis indicate that campus racial climate is a multidimensional construct that may differ across different racial/ethnic groups. Given the current findings and the unique history of African Americans in education, further examination into how African American undergraduates perceive racial climate and what it means to them is warranted.

Across both samples, all the CRCAAS subscales were positively correlated with sense of belonging. This suggests that campus racial climate at multiple levels can have an impact on African American students' sense of belonging to school. The institutional factors subscale was consistently related to private regard. Institutional factor include many aspects related to the promotion and celebration of African Americans' culture, history, and accomplishments. Such a climate could increase the positive feelings African Americans have toward their racial group. Racial experiences and perceptions were related to academic environment stress. This finding indicates that negative attitudes and behaviors towards African American can lead to a stressful academic environment. For African American students, the daily stressors related to academic work are compounded by these negative racial experiences within the school context. Student interracial interactions were consistently related to both private regard and public regard. This suggests that having positive interracial interactions with peers outside the classroom can reinforce one's own positive feelings about their racial group and provide evidence that African American students are valued by others.

The measure demonstrated multiple forms of validity in a sample of African American students. Face validity (if it looks like racial climate) was established using the survey of previous items, content validity was established by sending the measure to scholars in the field to

evaluate, and construct validity (convergent and criterion-related) was demonstrated through statistical analyses (EFA, CFA, correlations, regressions). Discriminant validity was more difficult to establish. For some of the subscales, the relationship was stronger with campus/racial climate than with general campus climate; however, the measure was still highly correlated with general campus climate. This could be for several reasons. The campus racial climate and general campus climate measure that I used in this study are similar and were highly correlated with one another as well. Campus/racial climate's bivariate relationship to general campus climate was stronger than its relationship with two of the CRCAAS subscales (see Table 2). This indicates that the constructs as measured may be more similar to one another than to campus racial climate as defined and measured by this measure. African American students could have also answered the general campus climate questions from their perspective as African Americans, which could be informed by the racial climate. Another explanation is the very strong relationship between general campus climate and sense of belonging. The correlation between the two measures was .78, suggesting that the two measures may be assessing the same construct. This is likely given that the items of measures were very similar. Although discriminant validity was not established, I found evidence of incremental validity. The CRCAAS explained outcomes above and beyond general campus climate. This evidence gives the scale more weight and does indicate that the CRCAAS assesses a construct distinct from general campus climate.

The overall measure and subscales reflect and encompass many of the previous and conceptualizations of racial climate, including individual and interpersonal factors such as experiences with racism, interracial interactions, and attitudes and perceptions. The Racial Experiences and Perceptions subscale is similar to other measures such as the Racial Experiences

subscale (Reid & Radhakrishnan, 2003), Cross-Cultural Comfort (Helm, Sedlacek, & Prieto, 1998), Campus/Racial Climate (Cabrera & Nora, 1994; Cabrera et al. 1999), and Observed Racism on Campus (Johnson et al. 2014). The Student Interracial Interactions subscale is the only subscale that contains items from previous measure. These three items originated from the Interactions with Diverse Peers scale (Johnson, 2012), sharing similarities with other measures of racial climate such as the Positive Perceptions of Racial Climate scale (Johnson, 2012) and Positive Interactions with Diverse Peers in College (Locks et al., 2008).

4.2.1 Institutional factors.

One unique factor of campus racial climate emerged from the present study is institutional influence. Some scales measured the perceptions of university or institutional norms regarding race and diversity (Rankin & Reason, 2005); others included how the institution encourages interracial interactions (Chavous, 2005 & Green, Adams, & Turner). The CRCAAS fills the gap by assessing these previous factors, while also considering programs and services for African American students, recognition of African American accomplishments and culture, culturally-relevant curricula, organizations catering to African Americans, and the presence of African Americans in positions of leadership and authority. Research on African American educational achievement has found that these factors support African American college student academic success (Kneiss et al., 2015; Brooks et al., 2013; Rodgers & Summer, 2008; Hall & Martin, 2013; Grier-Reed, 2010). These previous findings were supported by the present study as the Institutional Factors subscale is significantly associated with outcomes such as sense of belonging, academic environment, and racial identity. The inclusion of this subscale in a measure of racial climate indicates the importance of university structures in promoting positive racial climates. It positions campus racial climate as something that is not just constructed by

individual interactions and perceptions, but also by decisions and structures at the university that guide these interactions and perceptions.

I used a social justice perspective in this project due its utility for understanding how African American college students experience racial climate. This perspective highlights the need to include institutional factors to address the systemic aspect of racial climate. Applying Jones' (1997) model of institutional racism to campus racial climate helps to explain how pre-existing social inequalities can be reproduced via campus racial climate. The CRCAAS reflects this framework by assessing negative stereotypes and attitudes toward African American students, whether their lived experiences or cultural backgrounds are reflected through curricula, racial prejudice, and how much the institution values African American Students. Assessing institutional factors is more important considering some of the ways that institutions may perpetuate inequality through their organizational structures and norms.

I also constructed the measure based on a strengths-based perspective. The items were positively valenced, meaning that higher scores on the CRCAAS indicated more positive perceptions of campus racial climate. This is important because campus racial climate is typically discussed and measured as something negative that needs to be improved. This measure is important because it assesses experiences that are indicative of a positive racial climate. The sequential transformative strategy I used for this study has the explicit goals of helping groups from marginalized backgrounds to find solutions to social problems. In the group interviews, I asked students what they thought could be done to improve the experiences of African American college students. Interestingly, much of the discussion was about how institutional factors affect African American students' experience on campus. This suggests that, for African American college students, the institution's practices and policies play a vital role in

shaping the campus racial climate. From this perspective, the CRCAAS could be used in studies that assess the positive experiences of African American students or serve as a framework for colleges to improve their racial climate.

4.3 Limitations and Future Directions

The study had several limitations. One limitation was that I was the only coder. This can become an issue with my bias influencing the interpretation and coding of the data. I attempted to account for this by taking detailed notes of my decision-making process and the emotions I felt during the group interviews. I also waited approximately a week to code the group interviews to prevent my emotions from influencing the coding since I feel very connected to the topic and the project. The results may not generalize beyond the sample due to the characteristics of the institution. Georgia State University is a racially and ethnically diverse institution. The school has more diversity than most PWIs, but the proportion of African Americans is not as high as it is at Historically Black Colleges and Universities. Future research should utilize the current measure in different samples of African American students attending varying types of institution to establish validity. The sociopolitical climate at the time of the group interviews may have had a history effect on the results. Students recalled experiences that were specifically related to the recent presidential election and inauguration, both occurring shortly before the start of group interviews. Certain aspects of the racial climate may not have been as relevant to participants if the group interviews had not taken place after the recent presidential election. This history effect is an additional reason for replication of the current study. Future studies can also apply this framework and methodology to understand how other racial/ethnic groups experience campus racial climate. Researchers can assess campus climate from the perspectives of students of color by first conducting initial group interviews to

determine relevant experiences and develop items, then by validating the measure with the same population. This will ensure the use of culturally relevant measures and that experiences of marginalized groups will be adequately addressed.

5 CONCLUSION

I have discussed the significance of this study due to its scholarly contributions, but more importantly this study has significance for African Americans students who have persevered through unwelcome, hostile, and violent racial climates at their colleges. From the moment the first African American student integrated a formerly segregated school, African Americans have endured indignities and brutality at these institutions of higher learning. These incidents continue to occur, sometimes with fatal outcomes (Rogers, 2012). The current political climate has left many individuals from marginalized backgrounds, (including African Americans, feeling unsafe and unwelcome in their environment; unsurprisingly, this has spilled over into the university setting. African American professors are under attack for stating their views, students are harassed and attacked, and many colleges fail to adequately address these issues (Ross, 2015). Richard Collins III, a Bowie State University student, was murdered at the University of Maryland when he was visiting a friend; the suspect is alleged to be a member of a hate group (Finley, 2017). At their most hostile, negative racial climates could spell death for someone who is at the wrong place at the wrong time. Colleges and universities should provide support for African American students at an institutional level through resources such as student organizations, programs and curricula. As highlighted by group interviews, this institutional support is vital for African American students. It is most important that we include the voices and experiences of African American students because these hostile environments threaten their academic, psychological, social, and physical well-being.

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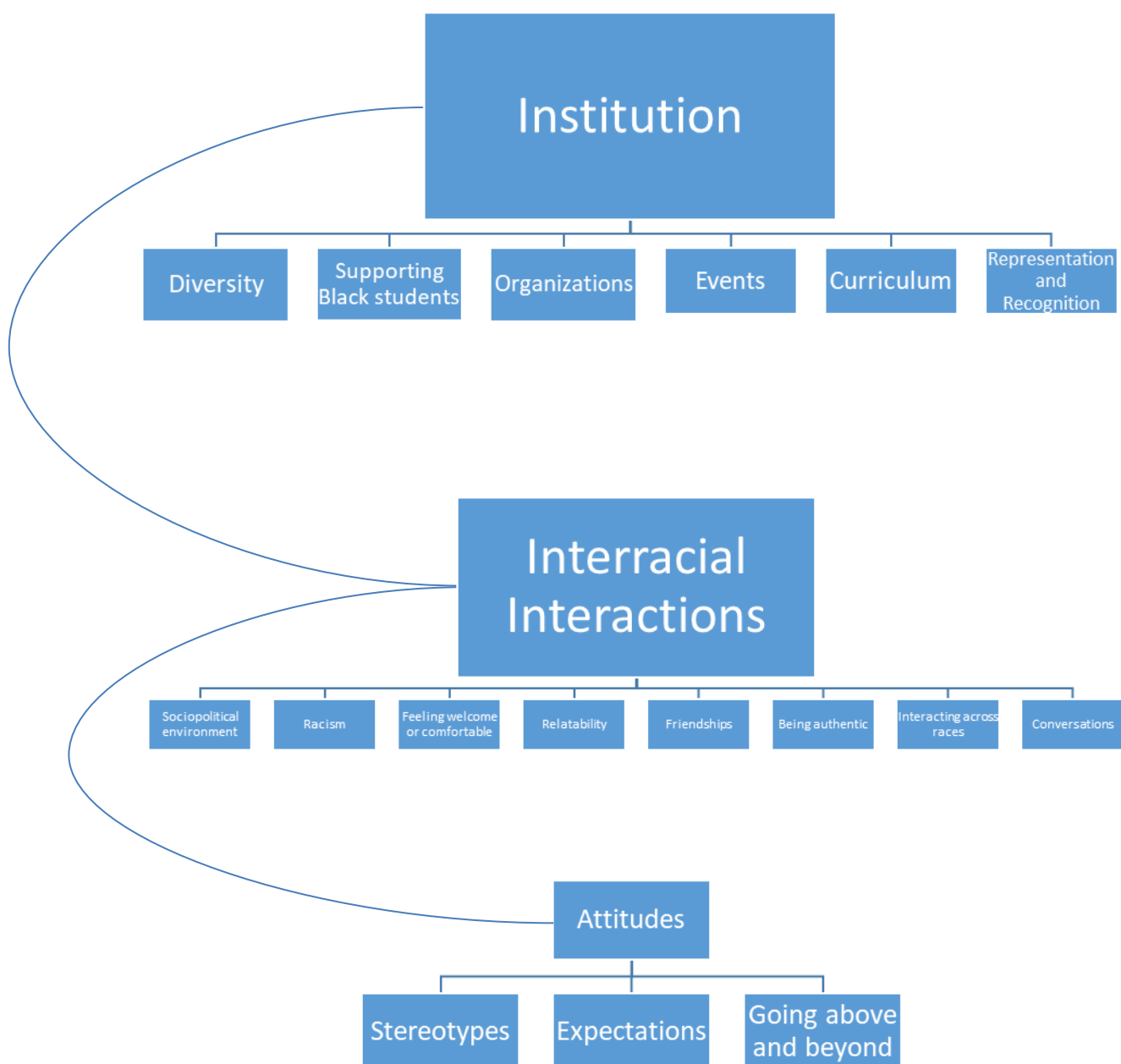
APPENDICES

Appendix A: Focus Group Guide

Thank you very much for agreeing to participate in today's focus group. My name is Dominique Thomas and I am a doctoral student in the community psychology program here at GSU. I am interested to learn more about the experience of African American college students. Research suggests that the extent to which students feel welcome on campus is very important. While there has been a lot of work in this area, there are still some things we are unsure of. One issue is studies define racial climate differently. Because we do not have a consistent definition of racial climate, it is hard for us to really know what we are measuring. We also don't know how relevant these measures are to the experiences of African American college students. So, the purpose of the focus groups is to get the opinions of African American students about what are relevant experiences with campus racial climate and use them to create a racial climate measure.

1. How can African Americans' college experiences be better?
 - a. Interracial interactions?
 - b. Experiences with racism on campus?
 - c. Attitudes that people have toward African American students?
 - d. Policies and practices do you think universities can implement?
2. How do you think a racial climate survey will be received?
3. What comes to mind when you hear the term *racial climate*?

Appendix B: Thematic Map



[illegible]

Appendix D: Campus Racial Climate Measure

Please indicate the degree to which you agree with the statements about your college environment.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neither agree nor disagree
- 4 = Agree
- 5 = Strongly Agree

1. The student body on campus is racially diverse.
2. The university has practices in place that support African American students.
3. The university has organizations that support African Americans (clubs, fraternities and sororities, etc.).
4. The university hosts events that promote and celebrate diversity.
5. The university hosts events that promote and celebrate African American culture.
6. There are courses available to me that focus on African American culture and history.
7. The university employs enough African American professors.
8. African Americans are represented in high-ranking positions (faculty, staff, administration).
9. African Americans are recognized for their accomplishments on campus.
10. The university tries to recruit African American students.
11. People on campus have negative stereotypes toward African American students (R).
12. People on campus have low expectations of African American students (R).
13. African American students must go above and beyond to get the same benefits as students of other races/ethnicities (R).
14. Professors respect African American students.
15. University police treat me fairly.
16. Professors try relate to African American students.
17. People on campus use racial slurs and commit racist acts against African American students (refusing service, saying the N-word, etc.) (R).
18. I only feel comfortable with other African American students (R).
19. Students only feel comfortable in their own racial/ethnic groups (R).
20. Students from other races and ethnicities can relate to African Americans.
21. I have a racially diverse group of friends.
22. Students establish friendships across racial lines.
23. I can be myself as an African American on campus.
24. People try not to offend each other during conversations about race.
25. It is easy to have conversations with people from other races and ethnicities.
26. The campus is racially divided (R).
27. I feel pressure to participate in ethnic activities at the university (R).

28. Students from different races and ethnicities attend social events together.
29. Students from different races and ethnicities study together.
30. Students from different races and ethnicities do extracurricular activities together.
31. I can talk honestly about race with students from other races and ethnicities.

Appendix E: Youth's Perception of the Value of Education

Georgia State University
Department of Psychology
Informed Consent

Title: African American College Students' Experiences with Campus Racial Climate
Principle Investigator: Wing Yi Chan, Ph.D.
Student Principle Investigator: Dominique Thomas, M.A.

I. Purpose: You are invited to participate in a research study. The purpose of this study is twofold. First, we aim to examine the experiences of African American college students with campus racial climate. Second, we aim to examine how these experiences are related to important outcomes for African American college students. All responses are kept in the strictest of confidentiality. Your name will not be associated with any of the data that you provide. You are invited to participate because you are a college student at GSU and self-identify as African American. A total of 400 participants will be recruited for this portion of the study. Participation will require approximately 30 minutes of your time.

II. Procedure: If you decide to participate, you will complete an online survey. You will be invited to provide consent by clicking "Yes." Once you have provided consent, the website will direct you to the survey. The survey should be completed in a quiet and/or distraction-free area. You will be asked questions regarding your experiences as an African American college student. Also, please answer the survey questions as honestly as possible. As a reminder, your name will not be associated with your responses. The survey should take approximately 30 minutes to complete.

III. Risks: You may feel some discomfort when asked to answer questions. If you feel any discomfort, you may drop out of the study at any time. You may skip any questions you do not feel comfortable answering.

IV. Benefits: Participation in this study may not benefit you personally. It is expected that this study will build on a foundation of knowledge regarding African American college students' experiences on college campuses.

V. Compensation: For your time, you will be given 1 research credits.

VI. Voluntary Participation and Withdrawal: Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. If you decide to drop out of the study, you will still receive the 2 research credits.

VII. Confidentiality: We will keep your records private to the extent allowed by law. Only the principal investigator and student principal investigator will have access to the information you

give. Information may also be shared with those who make sure the study is done correctly (e.g., GSU Institutional Review Board and the Office for Human Research Protection (OHRP)). Although we cannot guarantee your security, we have taken several steps to ensure that your responses remain confidential. Your answers to our online survey will be kept on a secure website that is maintained by GSU IT professionals. Also, we will not collect IP addresses. Your name will not be associated with any of the data that you provide. The information you give will be stored on password and firewall-protected computers in a locked research lab. Your name and other facts that might point to you will not appear when we present this study or publish its results. Any findings from this study will be summarized and reported in group form. You will not be identified personally.

VIII. Contact Persons: Contact Dr. Wing Yi Chan (wchan1@gsu.edu) or Dominique Thomas (dthomas60@student.gsu.edu) if you have questions about this study. You can also call if you think you have been harmed by the study. Call Susan Vogtner in the Georgia State University Office of Research Integrity at 404-413-3513 or svogtner1@gsu.edu if you want to talk to someone who is not part of the study team. You can talk about questions, concerns, offer input, obtain information, or suggestions about the study. You can also call Susan Vogtner if you have questions or concerns about your rights in this study.

IV. Copy of Consent Form to Subject: Please save or print a copy of this form for your records. If you are willing to volunteer for this research, please provide your name and e-mail address in the boxes below. Your name and e-mail address will be kept separate from your answers to the survey questions and are used only to reward credit for participation. Once you have entered your name and e-mail address, please click the button labeled "Yes". By clicking this button, you agree to voluntarily participate in this study.

What is your name? (Your name will be kept separate from your answers to the survey questions)

What is your email address? (Your email address will be kept separate from your answers to the survey questions)

Are you willing to volunteer for this research? By clicking "yes", you agree to voluntarily participate in this study

- ☐ Yes
- ☐ No

How old are you?

What is your gender? (please check one)

- ☐ Male
- ☐ Female
- ☐ Transgender

What is your ethnicity?

- ☐ African American
- ☐ Caribbean/Afro-Caribbean
- ☐ African
- ☐ Bi-racial (please specify) _____
- ☐ Multi-racial (please specify) _____
- ☐ Other (please specify) _____

What is your sexual orientation?

- ☐ Straight/Heterosexual
- ☐ Homosexual/Lesbian/Gay
- ☐ Bisexual

What is your current marital status?

- ☐ Married
- ☐ Divorced
- ☐ Single (never married)
- ☐ Single and living with another (co-habiting)
- ☐ Separated

Were you born in the United States?

- ☐ Yes
- ☐ No

If you were NOT born in the United States, how many years have you lived in the U.S.?

Did you grow up in the United States?

- ☐ Yes
- ☐ No

How would you describe your current employment status?

- ☐ Employed full-time (40+ hrs. per week)
- ☐ Employed part-time (39 hrs. or less per week)
- ☐ Unemployed
- ☐ Other (please specify) _____

What is your current classification at GSU?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Non-degree seeking student

What is your current grade point average (GPA) at GSU?

What is your current household income in U.S. dollars (this includes income from you and other people in your household)?

- ☐ Under \$10,000
- ☐ \$10,000 - \$19,999
- ☐ \$20,000 - \$29,999
- ☐ \$30,000 - \$39,999
- ☐ \$40,000 - \$49,999
- ☐ \$50,000 - \$74,999
- ☐ \$75,000 - \$99,999
- ☐ Over \$100,000

Please indicate the degree to which you agree with the statements about your college environment.

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The student body on campus is racially diverse.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The university has practices in place that support African American students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The university has organizations that support African Americans (clubs, fraternities and sororities, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The university hosts events that promote and celebrate diversity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The university hosts events that promote and celebrate African American culture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are courses available to me that focus on African American culture and history.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The university employs enough African American professors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

African Americans are represented in high-ranking positions (faculty, staff, administration).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
African Americans are recognized for their accomplishments on campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The university tries to recruit African American students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People on campus have negative stereotypes toward African American students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People on campus have low expectations of African American students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
African American students must go above and beyond to get the same benefits as students of other races/ethnicities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professors respect African American students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University police treat me fairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professors try to relate to African	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

American students.					
People on campus use racial slurs and commit racist acts against African American students (refusing service, saying the N-word, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I only feel comfortable with other African American students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students only feel comfortable in their own racial/ethnic groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students from other races and ethnicities can relate to African Americans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a racially diverse group of friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students establish friendships across racial lines.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can be myself as an African American on campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People try not to offend each other during conversations about race.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It is easy to have conversations with people from other races and ethnicities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The campus is racially divided.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel pressure to participate in ethnic activities at the university.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students from different races and ethnicities attend social events together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students from different races and ethnicities study together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students from different races and ethnicities do extracurricular activities together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can talk honestly about race with students from other races and ethnicities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate to which you agree with these statements about your experiences on campus

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Heard negative words about minorities while attending classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Believed students were prejudiced against minorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Observed discriminatory words, behaviors, or gestures directed at minority students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thought that instructors treated all students the same regardless of race	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate the degree to which you agree with these statements about your college campus

	Strongly disagree	Disagree	Agree	Strongly agree
I feel a sense of belonging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I am a member of the campus community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would choose the same college over again	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My college is supportive of me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate on a scale of 1 (no stress) to 4 (severe stress) the degree to which you feel stress related to the academic environment

	1	2	3	4
Negative classroom environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor relations with instructors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making connections with instructors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In a major I do not like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Difficulty getting the help/advice I need in my school/college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lacking connection to my school/college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

